Serial Number: 10/032329 Filing Date: December 31, 2001

Title: Zero Mounting Force Solder-free Connector/Component and Method

Assignee: Intel Corporation

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REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on October 3, 2003, and the references cited therewith.

Claims 1-3 and 5-9 are amended, claims 13-14, 19-20, and 30 are canceled, and claims 31-34 are added; as a result, claims 1-12, 15-18, 21-29, and 31-34 are now pending in this application.

Previously withdrawn claims 13-14, 19-20, and 30 have been canceled. Applicant reserves the right to reintroduce these claims in continuation or divisional applications at a later date.

§112 Rejection of the Claims

Rejection: Claims 1-12, 15-18 and 21-29 were rejected under 35 USC § 112, first paragraph, as failing to comply with the enablement requirement. According to the Examiner, the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner contends that the drawing Figures indicated by applicant in the response of February 2, 2003 as being directed to the elected species I do not show structure in sufficient detail to indicated how the oval pins are turned to bind in the substrate holes. The specification relating to said Figures offers no specific support either. The Examiner then concludes that the elected claims cannot be further examined on their merits.

Response:

A) Applicable Law

The enablement requirement refers to the requirement of 35 U.S.C. 112, first paragraph that the specification describe how to make and how to use the invention. The invention that one skilled in the art must be enabled to make and use is that defined by the claim(s) of the particular application or patent. (See MPEP 2164)

The purpose of the requirement that the specification describe the invention in such terms that one skilled in the art can make and use the claimed invention is to ensure that the invention is communicated to the interested public in a meaningful way. The information contained in the

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disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention. Detailed procedures for making and using the invention may not be necessary if the description of the invention itself is sufficient to permit those skilled in the art to make and use the invention. A patent claim is invalid if it is not supported by an enabling disclosure. (See MPEP 2164)

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Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Accordingly, even though the statute does not use the term "undue experimentation," it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. ("The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.") (See MPEP 2164.01)

B) Argument: The Rejection of claims 1-12, 15-18 and 21-29 is improper

The applicant respectfully submits that the specification of the present application, as filed, clearly enables persons skilled in the art to make and use the invention without undue experimentation as required by MPEP 2164.01. Original Figures 5B and 6B include arrows which indicate that the pins 31, 32, 33, 36, 37 and 38 are moved. Original Figures 7 and 9 show a first position and a second position (in phantom). The discussion of Figures 12 and 13 discuss rotation the oval pin 90 degrees "...to be in a second position, to thereby be in a structural interference fit with the long dimension a' that slightly exceeds the oval opening short dimension b. The movement of the oval pin from the first position t the second position creates a solder-free mechanical and electrical connection between the oval pins and the sides of the plated through holes." (See page 10 of the specification). Original Figure 11 is taken along

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section line 11-11 in original Figure 6. Figure 11 shows a sliding plate 65 having rectangular openings 66,67, which are provided with rack gear teeth sets 78, 79 which engage the pinion gear portion 75 of at least one of the connectors 31. (See Original Figures 10A, 10B, 10C and 11). Each of the pins 31, 32, 33, 36, 37, 38 include a gear portion 75, 76, 77, 80, 81, 82. (See bottom of page 12 and top of page 13 of the specification). The specification also indicates that a cam or screw could also be used to move the plate 65. (See end of first paragraph on page 13). The specification (written portion and the figures), therefore, shows multiple ways to move the

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The MPEP states that the specification is reviewed to determine enablement. Enablement is not determined by the description of figures associated with a particular species. Since the enablement requirement is met, the rejection under As a result, the rejection under 35 USC § 112, first paragraph, as failing to comply with the enablement requirement should be overturned and the examiner should provide an examination of the claims.

pins 31, 32, 33 36, 37, 38 and also a specific embodiment sufficient to enable one skilled in the

art to make and use the invention without undue experimentation.

In addition, applicant contends that there is one or more generic claims in the case. Claims 1, 10, 15, 25 and 28 all appear to be generic to all species set forth previously. In the alternative, new claim 31 is generic and covers all species of the invention.

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 373-6977) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By their Representatives,

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Date 12/4/2003

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 4 day of 2003.

CHUA LEE

Signature

Name